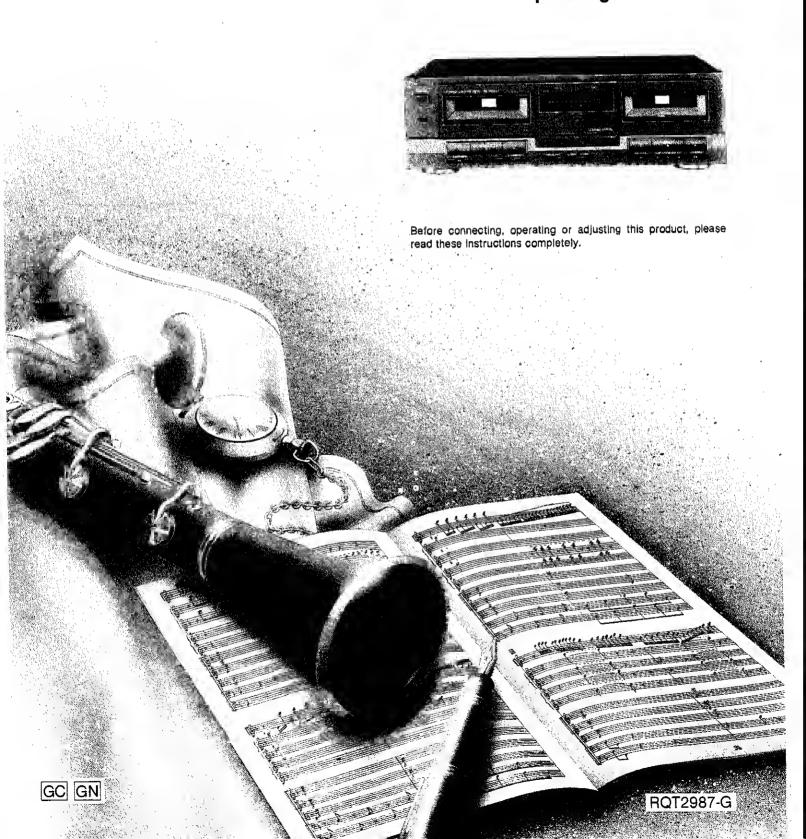
# **Technics**<sup>®</sup>

# Stereo Cassette Deck RS-TR252

**Operating Instructions** 



## Dear Customer

Thank you for purchasing this Technics product. For optimum performance and safety, please read these instructions carefully.

(For areas except Australia and N.Z.)

#### **CAUTION:**

The AC voitege ie different eccording to the eree.

Be sure to set the proper voltage in your aree before use.

(For deteils, pieese refer to the page 5.)

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# Suggestions for safety

#### Placement

Avoid placing the unit in areas of:

- direct sunlight
- high temperature
- high humidity
- excessive vibration
- uneven surfaces. (Place the unit on a flat level surface).
   Such conditions might damage the cebinet and/or other component parts and thereby shorten the unit's service life.

#### Ventilation

Place the unit in a well ventilated position et least 10 cm awey from well surfaces etc.

### Stacking

Never place heavy items on top of the unit or the power cord,

### Voltage

- It is very dangerous to use an AC power source of high voltage such as for an air conditioner.
- A fire might be caused by such a connection.
- A DC power source cannot be used.
   Be sure to check the power source carefully, especially on a ship or other place where DC is used.

### Power cord protection

- Avoid cuts, scratches or poor connection of the AC mains cord, as this may rasult in fira or electric shock hazard.
   Excessive bending, pulling or slicing of the cord should also be avoided.
- Do not pull on the cord when you are disconnecting the power, as this could ceuse an electric shock. Grasp the plug firmly when you disconnect the power supply.
- Never touch the plug with wet hends or a serious electric shock could result.

### Foreign materials

- Ensure that no foreign objects, such as needles, coins, screwdrivers etc, eccidentelly fall into the unit or through the ventilation holes.
  - Otherwise, a serious electric shock or malfunction could occur.
- Be extremely cereful about spilling weter or liquid on/into the unit, as a fire or electric shock could occur.
   (Disconnect the power plug and contact your dealer immediately if this occurs.)
- Avoid spraying insecticides onto the unit es they contein flammable gases which can be ignited.
- Insecticides, alcohol, paint thinner and similar chemicels should never be used to cleen the unit as they can cause fleking or cloudiness to the cabinet finish.

#### **Maintenance** (See page 15.)

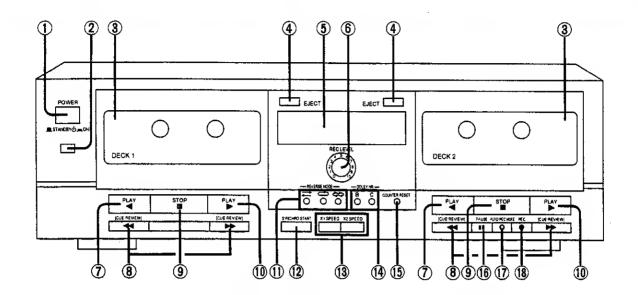
Clean the cabinet, penel and controls with a soft cloth lightly moistened with mild detergent solution.

Do not use any type of ebresive pad, scouring powder or solvent such as alcohol or benzine.

#### Service

- Never attempt to repair, disassemble or reconstruct the unit if there seems to be a problem.
- A serious electric shock could result if you ignore this pracautionary measure.
- If a problem occurs during operation (the sound is interrupted, indicators fall to illuminate, smoke is detected, etc) contact your dealer or Authorised Service Center immediately.
- Disconnect the power supply if the unit will not be used for a long time. Otherwise the operation life could be shortened.

# Front panel controls



No.	Name Ref. p	age
	Power "STANDBY () _ ON" switch (POWER, _ STANDBY () _ ON)  Press to switch the unit from on to standby mode or vice sa. In standby mode, the unit is still consuming a samount of power.	
-	Remote control signal receptor (Refer to "About the remote control function" on page	7.)
3	Cassette holder	_
4	Eject button (EJECT)	6
<u>(5)</u>	Display	_
<u>6</u>	Recording-level control (REC LEVEL)	10
7	Reverse-side playback button (◀ PLAY)	6
8	Fast-forward/cue, rewInd/review buttons (◄◄/▶▶ [CUE/REVIEW])	9
9	Stop button (■ STOP)	6
10	Forward-side playback button (▶ PLAY)	6

No.	Name Rei	f. page
_	everse-mode select buttons EVERSE MODE)	6,7
① Sy	nchro-start button (SYNCHRO STAF	RT) 12
	pe-to-tape recording-speed buttons 1 SPEED, ×2 SPEED)	12
_	olby noise-reduction buttons OLBY NR)	6,10
(§) Co	ounter reset button (COUNTER RESE	ET) 8
16 Pa	ause button (III PAUSE)	6
_	utomatic-record-muting button AUTO REC MUTE)	11
18 Re	ecord button ( REC)	10

## Connections



Please check and identify the supplied accessories

AC power supply cord (For Australia snd N.Z.)	(For others)	Stereo connection cables 2	Power plug adaptor 1 (Not supplied for Australia snd N.Z.)

Before making connections, make sure thet the power to this unit and all other system components is turned off.

#### Note

- Avoid letting the cables touch each other as much as possible, otherwise noise will be generated.
- Although the figure below shows the AC power supply cord being connected to a household AC outlet, if the amplifier (or receiver) is equipped with an AC outlet, connect the cord to that outlet.

#### **Piscement hints**

If this unit is placed near e receiver or e tuner, a "hum" noise may be heard during tape playback, recording, or AM reception of the receiver or the tuner.

if this occurs, leeve es much space as possible between the units, or place them where there is the least emount of "hum".

#### (For srsss sxcspt Australis and N.Z.)

Set the voltage selector to the voltage setting for the eree in which the unit will be used.

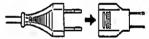
[Use a minus (-) screwdrlver]

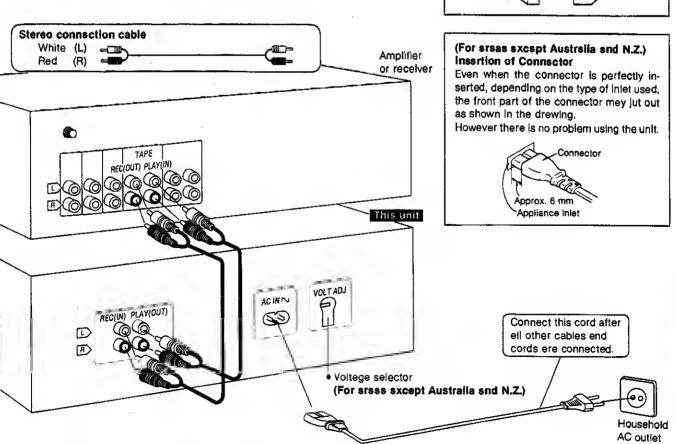
#### Note

If the power supply in your area is 117 V or 120 V, set to the "127 V" position.

Note that this unit will be seriously damaged if this setting is not made correctly.

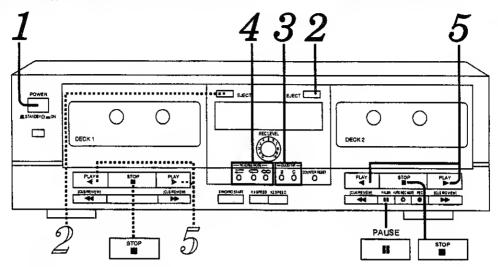
If the power plug will not fit your socket, use the power plug edaptor (included).



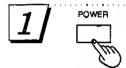


# Playback

Either normal, CrO<sub>2</sub> or metal type cassettes can be used.



The procedures described below are an example of pleybeck on Deck 2.

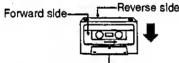


Press POWER.

(The unit will switch on.)



Press EJECT, and then insert the cassette tape.



Tape opening facing downward.

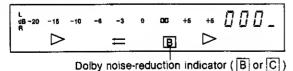


DOLBY NR O O Press either DOLBY NR B or C to select the appropriate noise-reduction system.

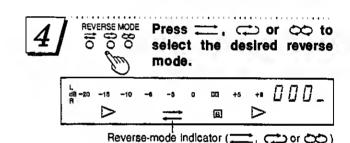
- Press if the tepe wes recorded by the type-B Dolby NR system.

  (The B Dolby noise-reduction indicetor will then illuminete.)
- C Press if the tape was recorded by the type-C Dolby NR system.

(The C Dolby noise-reduction indicator will then illuminete.)



If neither Dolby noise-reduction system was used, press the button corresponding to the Dolby noise-reduction indicator that is illuminated. (The indicator will then switch OFF.)

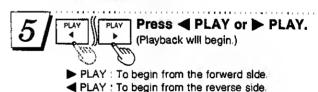


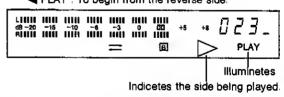
: One side only.

Both sides repeatedly (up to 8 times).

Both sides, once only.

(Refer to page 7.)





To play back on Deck 1, in steps 2 and 5 above, press the buttons ( 2 and 5 ) for Dack 1.

## To temporarily stop playback (Deck 2 only)



Press II PAUSE.

The "PLAY" indicator will flash.

To resume pleyback, press the play button corresponding to the side of the tepe being played.

#### To stop playback



Press STOP.

The "PLAY" indicator will switch off.

### Reverse function

The reverse function on this unit has three modes (\_\_\_\_, \_\_\_, \_\_\_, \_\_\_, \_\_\_). Read the descriptions below and select the mode as desired. (Refer to step 4 on page 6.)

Mode	Tepe travel		
Only one side of the tape (either the forwar or the reverse side) will be played, and ope will automatically stop when playback hes completed.			
t	Both sides of the tape will be played repeatedly eight times, and then operation will eutomatically stop.  (If playback is begun from the reverse side, the for ward side will be played seven times.)		
8	ward side will be played seven times.)  When there is a tepe in only one of the decke Both sides of the tape will be pleyed once, and then operation will autometically stop.  (If playback is begun from the reverse side, the forward side will not be pleyed.)  When there is a tepe in each of the decks  The forward and reverse sides of the tepe in Deck 1 will be played, followed by the forward and reverse sides of the tape in Deck 2, end after this operation is repeated eight times, operation will automatically stop.  (If playback is begun from Deck 2, the tape in Deck 1 will be played seven times.)		

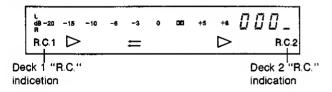
# About the automatic-tape-select function

This unit is equipped with the eutometic-tepe-select teature; it autometicelly detects the type of tape being used, and then makes the suiteble edjustments of the bies and equalization accordingly.

### About the remote control function

This cassette deck cen be operated by using the remote control provided with a Technics emplifier. (For detailed information, refer to the operating instructions of the amplifier.)

During operation from the remote control, the "R.C." indicator will light up.



# About the Dolby noise-reduction system

The Dolby noise-reduction system is designed to effectively reduce the annoying high-frequency "hissing" noise typical of cassette tapes. During recording, the system functions to increase the high-frequency sound level, the sound, end then, during pleybeck, that same portion is weakened to bring it beck to the previous level.

This unit includes two types of Dolby noise-reduction systems, the Dolby B NR-type and C NR-type.

#### Dolby B-type noise-reduction

Noise is reduced to ebout one-third

Use this system when playing beck tapes recorded by the Dolby-B noise-reduction system, such as prerecorded music tapes, etc.

#### Doiby C-type noise-reduction

Noise is reduced to ebout one-tenth.

Use this system for the recording and playbeck of sound sources that heve a wide dynamic range end good tone quelity, such es FM broedcests of live performences, etc., and for playing back such tapes.

# About the Dolby HX-Pro headroom extension system

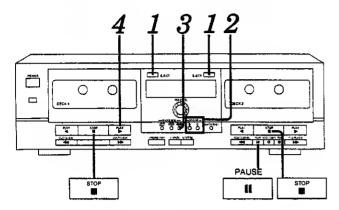
By functioning to improve the meximum output level of the tape's high-frequency renge, this system permits recordings without e reduction in the level of the sound source's high-frequency range. In addition, by using the system in parallel with this unit's noise-reduction system, recording end playback with a greatly extended dynemic range is possible.

Dolby noise reduction end HX Pro headroom extension manufactured under license from Dolby Laboretories Licensing Corporation. HX Pro origineted by Beng & Olufsen.

"DOLBY", the double-D symbol and "HX PRO" ere tredemarks of Dolby Laboratories Licensing Corporation.

# ies plauback

Both sides of the tape in Deck 1 will be pleyed, followed by both sides of the tepe in Deck 2. (Repeated up to eight times.)



Note that for series playback it is not possible to select different types of Doiby NR for Deck 1 and Deck 2, it is recommended that you use two tapes which were recorded using the same type of Dolby NR (or both recorded without Dolby NR).



Press EJECT on both decks, and then insert the cassette tapes.



DOLBYNE Ŏ

Press either DOLBY NR B or C to select the appropriate noise-reduction system.









#### Press ► PLAY on Deck 1.

(Series playback will begin from the forward side of the tepe in Deck 1.)

#### To temporarily stop playback (Deck 2 only)



#### Press !! PAUSE.

To resume playback, press the play button corresponding to the side of the tape being pleyed.

#### To stop playback



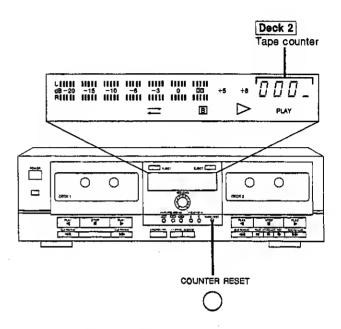
Press STOP for the deck which is playing.

#### For your reference:

it is also possible to begin series pleyback from the reverse side of the tepe in Deck 1 or from Deck 2. (Refer to the tepe travel table on page 7.)

## Tape counter (Deck 2 only)

The tape counter indicates the amount of tape travel as a numerical value based on the number of revolutions of the tepe



### To reset the tape counter

COUNTER RESET

#### Press COUNTER RESET.

The tape counter Indication will return to "000".



#### For your reference:

When the tope is trevelling in the reverse direction, the value displayed on the tape counter will count down.

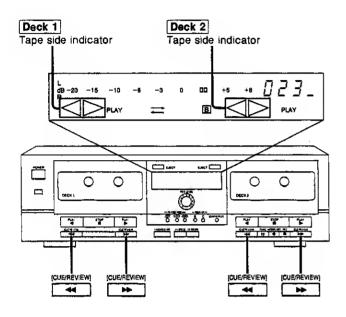
After "000" is reached, the display will switch to "999" and will then continue counting down.

# To fast-forward or rewind the tape

# To cue or review

"Cua" maans that the tape is fast forwardad as it is baing playad back.

"Review" means that the tapa is rewound as it is being played back.

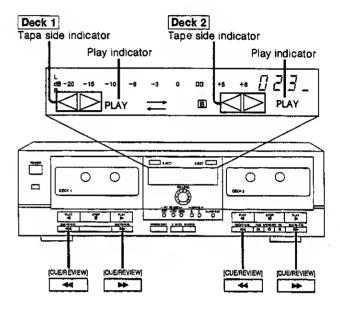


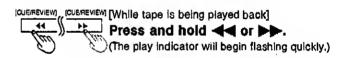


Because this unit is capable of playing back both sides of the tape, the operation changas in accordence with the direction of tha tape side indicator.

Tepe side indicator	Rewind	Fast-forward
$\triangle$	[CUE/REVIÈW]	CUE/REVIEW
	(CUE/REVIEW)	[CUE/REVIEW]

 Cassette tapas in dack 1 and dack 2 can be advanced or rewound at the same time.





Normal pleyback will resuma at the point where the button is released.

Because this unit is capable of playing back both sides of the tape, the operation changes in accordance with the direction of the tapa side indicator.

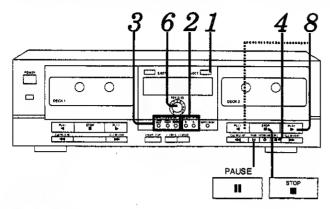
Tape side indicator	Review	Cue
	[CUE/REVIEW]	(CUE/REVIEW)
	(CUE/REVIEW)	[CUE/REVIEW]

#### Note

The cue/reviaw function causes sounds to become high pitched. During this function, be sura to dacraase the ampliflar's voluma to prevant damaga to the spaaker system's tweeters.

## Recording (Deck 2 only)

Either normal, CrO<sub>2</sub> or metal type cassettes can be used



Preparation

Wind the tape past the leader tape section so that recording can begin straight away.





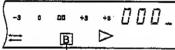
Press EJECT on Deck 2, and then ineert the cassette tape to be used for recording.

2/



Press either DOLBY NR B or C to select the desired noise-reduction system.

(Refer to the opposite page.)



Dolby noise-reduction indicator (B or C)

3/



Press \( \sigma\), \( \sigma\) or \( \sigma\) to select the desired reverse mode.



Reverse-mode Indicator ( , or or or)

Only one side will be recorded, and then operation will automatically stop.

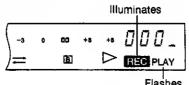
Both sides (the forward side first, and then the reverse side) will be recorded, and then operation will automatically stop.





#### Press REC.

(The unit will be in the recording standby mode.)





Play the source in order to adjust the recording sound.





Use the REC LEVEL control to adjust the recording level. (Refer to the opposite page.)

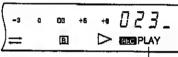
7/

Stop piey of the source.



Press ■ PLAY or ► PLAY to begin recording, end pley the source to be recorded.

➤ PLAY : Forward side <a> PLAY : Reverse side</a>



Illuminates

#### Note

When recording on both sides of the tape, be sure to press the PLAY button.

#### To temporerily stop recording



#### Press | PAUSE.

To resume recording, press the play button corresponding to the side of the tape being recorded upon.

#### To stop recording



Press STOP.

### About the selection of the Dolby NR type

The Doiby NR effect can be obtained by using the same type of Dolby NR during both recording and pleyback. Refer to the following table when selecting the type (either B or C).

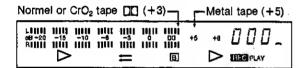
Туре В	Use this type when the deck on which the tape will be played back is equipped with only type B Dolby NR.
Туре С	Use this type when the deck on which the tape will be played back is equipped with type C Dolby NR. (for exemple, when this unit is elso going to be used to play beck the tepe.)

(Refer to "About the Dolby noise-reduction system" on page 7.)

### About the recording level adjustment

If the recording level is too high, there will be distortion in the recorded sounds, and if it is too low, the hiss noise inherent to recording tapes will become noticeable.

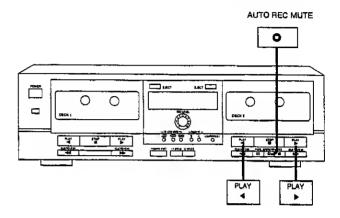
In order to make high-quelity recordings, use the REC LEVEL control to edjust so that highest values of the input level indicated by the level meter do not exceed the standard recording level (the number indicated in parentheses) for the tape being used.



#### To make a silent interval

By simply pressing AUTO REC MUTE button, while a recording is being made, a silent intervel (which is necessary for locating the beginning of a tune during pleyback) can be made.

This feature is also convenient for omitting unwanted material such as commercial messages, etc. during recording.



#### To make a 4-second silent interval



AUTO REC MUTE Press AUTO REC MUTE momentarily while a recording is being made.

> A 4-second elient interval will be recorded, and the unit will automatically be set to the recording standby mode.

#### To make a silent interval more than 4 seconds

AUTO REC MUTE



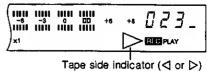
Press and hold AUTO REC MUTE for the necessary number of seconds while a recording ia being

The unit will change to the recording stand-by mode when the button is released.

To resume recording



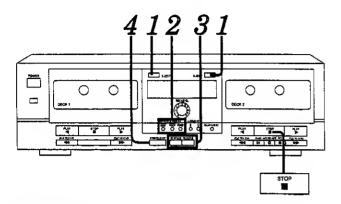
Press either ◀ PLAY or ▶ PLAY, corresponding to the side of the tape side indicator which ia iit.



# Tape-to-tape recording

Either normal, CrO<sub>2</sub> or metal type cassettes cen be used.

Use Deck 2 to record the sound being played back on Deck 1,



Preparation

Wind the tepe pest the leader tepe section so that recording can begin straight away.

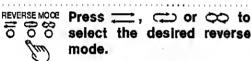


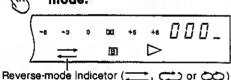
EJECT

Press EJECT on both decks, and then insert the cassette tapes.

Deck 1: For playback Deck 2: For recording







- Only one side of the tepe will be recorded, and then operation will automatically stop.
- Both sides of the tape (first the forward side end then the reverse side) will be recorded, end then operation will automatically stop.

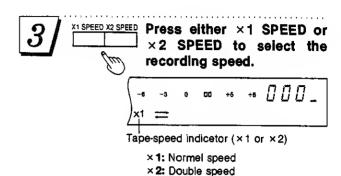
If the recording tape is longer then the pleybeck tape, the pleybeck tepe will be played repeatedly as many es eight times until the recording tape is finished.

Both sides of the tape (first the forward side and then the reverse side) will be recorded once, end then operation will autometically stop.

#### Note

To record on only one side of the tape, set the tape side indicetors (⊲ or ⊳) on Deck 1 and Deck 2 in eccordence with the tape sides to be played beck and recorded.

To record on both sides of the tepe, set the tape side indicators on both Deck 1 end Deck 2 to the forward side (>).





Prese SYNCHRO START.

(The recording will begin.)

#### To stop recording



Press STOP on Deck 2.

(On Deck 2)

#### Note

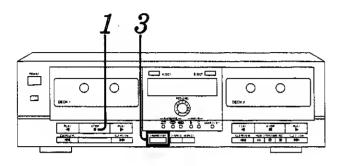
In order to avoid operation errors leter, be sure to switch OFF the SPEED buttons (the "×1" and "×2" indicators will go out) efter the tape-to-tape recording has finished.

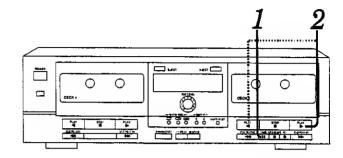
#### For your reference:

- The recording level and the Dolby effect will be recorded as they are on the tape being played back.
- Because the signel being recorded from Deck 1 onto Deck 2 does not pass through the amplifler, it is possible to change the setting of the emplifier's input selector during recording in order to listen to some other sound source.

#### Note

When recording with the recording speed set to double speed, noise interference mey be recorded onto the tape if there is e television set neerby, so make the recording in e location separated from the television set or switch off the television set during recording.





#### To record selected tracks





# During recording, press STOP on Deck 1.

(Deck 1 will stop, and Deck 2 will record a 4-second silent interval and then enter the recording standby mode.)

2

# Operate Deck 1 to find the track you wish to record.

It is elso possible to change the playback tape at this time.

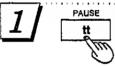
3



#### Press SYNCHRO START.

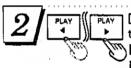
(Recording will resume.)

# To cut unwanted parts during recording



# Press [ PAUSE during recording.

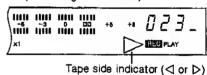
(Deck 2, which was recording, will enter the pause mode, and Deck 1 will continue playback.)



[When Deck 1 reaches a part you wish to record]

Press either ◀ PLAY or ► PLAY, corresponding to the side of the tepe side indicator which is lit.

(Recording will resume.)



#### To erase recorded sound

When new recordings are mede on e pre-recorded tape, ell sounds recorded on thet portion of the tepe ere autometically erased. To erese a tepe without making a new recording, follow the steps below.

- 1 Prsse EJECT on Dsck 2 and then insert the recorded ed cessette tage.
- Press either DOLBY NR B or C so that the Doiby NR Indicetors are off.
- - To erase one side of the tape.
  - , co: To erase both sides of the tape.

- 4 Sst the REC LEVEL control to "0".
- 5 Press REC.

(The unit will be in the recording standby-mode.)

- 6 Press ■ PLAY or ▶ PLAY to begin eresing the tepe.
  - ► PLAY : Forward side
  - PLAY : Reverse side

#### Note

To erase both sides of the tape, be sure to press the ▶ PLAY button.

## Concerning cassette tapes

### Selection of cassette tapes

#### Casaatta tapaa axceeding 90 minutas

These tapes ere hendy for their long pleyback and recording time but be careful about repeetedly stopping and starting, rewinding and fast forwarding these tapes in short intervals as they are thin, tend to stretch and may become entangled in deck mechanism.

#### **Endless tapes**

If the proper operating method is not followed, the tape will become wrapped around the rotating parts. Be absolutely sure to reed the directions for use eccompenying the tape.

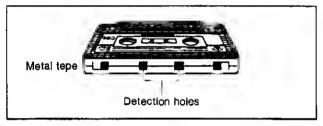
Since this unit has an auto reverse capability, the use of tapes which support this capability is recommended.

#### Fe-Cr tapes (TYPE III)

The high frequency range will be emphasized, and it will not be possible to obtain a flat frequency response.

#### Metal tape without detection holes in the caseetts

Recordings will be very distorted. (However, there will be no problem with pleyback.)



### Tape slack

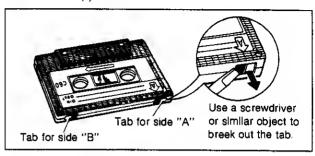
Tspe slack may cause the tape to break.

Use a pencil or similar object to take up the slack.



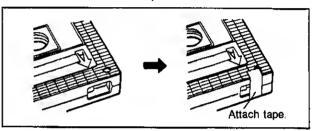
### Erasure prevention

Remove the tab(s).



#### To re-record on a protected caesette

Cover the slot with adheeive tape.



### Tape storage

Tapes can be damaged if stored in pieces such as those described below.

- Where the tempereture Is high (95° F/35° C or higher) or where the humidity is high (80% or higher)
- Where there is a strong magnetic field (neer e speaker, on top of a TV, etc.). Recording may become erased.
- in direct sunlight

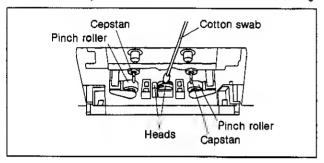
### Maintenance

#### Head care

To assure sound quality for recording and playback, be sure to clean the heeds efter approximately every 10 hours of use.

- 1) Press the power switch to switch to the standby condition,
- 2) Press the eject button to open the cessette holder.
- Clean the heads, pinch roller and the capstan shaft with a cotton swab (or with a soft, lint-free cloth) slightly moistened with isopropyl alcohol.

Do not use any solution other than alcohol for head cleaning



### Head demagnetization

In order to maintain good sound quality during racording and playback, it is recommended that the head assembly be demagnetized if distortion or poor sound quality persists after cleaning the heeds.

If the head assembly becomes magnetized, it could create noise in the recordings, loss of high-frequency response or erasure of valueble recordings.

Several types of heed demegnatizers are available and may be purchased separetely et local electronics supply stores. Follow the instructions that are supplied with the device.

Do not bring any typa of metal objects or tools such as magnatic screwdrivers in contact with the heed essembly.

### Maintenance of external surfaces

To clean this unit, use a soft, dry cloth.

If the surfaces are extremely dirty, use e soft cloth, dipped into e soep-end-water solution or a weak datargent solution.

Wring the cloth well before wiping the unit.

Wipe onca egeln with e soft, dry cloth.

Naver use elcohol, paint thinnar, benzine, nor a chemically treated cloth to clean this unit.

Such chemicals may damaga the finish of your unit,

# Technical specifications

#### **CASSETTE DECK SECTION**

Dack systemStereo cessette deckTreck system4-treck, 2-channelRscording systsmAC biasBiss frequency80 kHzErselng systsmAC erase

Hssds

DECK 1 Playback head (Permalloy) × 1
DECK 2 Recording/Playbeck head (Permalloy) × 1
Erasing heed (Double-gap ferrite) × 1

Motors

DECK 1 Capsten/Reel table drive (DC servo motor) × 1
DECK 2 Capstan/Reel table drive (DC servo motor) × 1
Tspe spssd
Wow snd fluttsr
Capstan/Reel table drive (DC servo motor) × 1
4.8 cm/s. (1-7/8 ips)
0.14% (WRMS)

Fast forward and rewind times

Approx. 110 seconds with C-60 cassette tape

Frequency responss (Dolby NR off)

NORMAL 40 Hz−15 kHz, ±3 dB 20 Hz−16 kHz (DIN) CrO₂ 40 Hz−15 kHz, ±3 dB

20 Hz – 16 kHz (DIN)

METAL 40 Hz – 16 kHz, ±3 dB

20 Hz - 17 kHz (DIN)

S/N (Signel level = max recording laval, CrO<sub>2</sub> type tape)

NR off 58 dB (A waighted)
Dolby B NR on 66 dB (A weighted)
Dolby C NR on 74 dB (A weighted)

input seneltivity and impedance

REC (IN) 60 mV/47 kΩ

Output voltage and Impedance

PLAY (OUT) 400 mV/800 Ω

#### **■** GENERAL

Power consumption

For Australis end N.Z. 20 W For others 22 W

Powar supply

For Australis end N.Z. AC 50 Hz/60 Hz, 230—240 V
For others AC 50 Hz/60 Hz, 110 V/127 V/220 V/230—240 V
Dimensions (W × H × D) 430 × 136 × 290 mm
Wsight 4.7 kg

#### Note:

Spacifications are subject to change without notice. Weight end dimensions are approximate.

# Troubleshooting guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.

If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to

the directory of authorized service centers (enclosed with this unit) to locate a convenient service center, or consult your Technics dealer for instructions.

Problem	Probable cause(s)	Suggested remedy
Tepe moves but no eound le heerd.	The volume control of the amplifier is set to its minimum position.	Adjust the volume control to the desired level.
	The input selector of the amplifier is not set to the "TAPE" position.	Set to the "TAPE" position.
Distorted eound.	The recording level is too high.	Select the appropriate recording level.
Previouely recorded sound hes not been eraeed.	Erese head is dirty.	Clean the head.
Sound output is hoarse or	Heads are dirty.	Clean the heads.
unsteedy.	Tape is damaged.	<ul> <li>Try operation with a new cassette; if there is no problem with the new cessette, discard the dameged cassette.</li> </ul>
Poor sound quality (especially in the high trable and low bass ranges).	The correct Dolby noise-reduction button is not set.	Set it to the correct position.
Sound is low, poor tone, intermittent sound noise,	Heads, capstan and/or pinch roller are dirty or tepe is damaged.	Clean the heads, capstan and/or plnch roller, or try a new cessette.
A "hum" noise le heerd during tepe pleybeck or recording.	This unit is pieced too close to a receiver, empiritier or tuner.	<ul> <li>Leave as much space es possible between the units, or plece them where there is the leest emount of "hum".</li> </ul>
Recording le not poseible.	The recording level control is at the "0" position.	Select the eppropriate recording level,
	One of the tepe-to-tape recording-speed indicators (" × 1" or " × 2") is illuminated.	Switch OFF whichever tape-to-tepe recording speed indicator is illuminated (by pressing the SPEED button).
TV noise is eccidentelly recorded.	This unit is placed near a TV.	• Try placing this unit further away from a TV.

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